深圳市荣丰慧通电子有限公司
SHENZHEN ROFENG WISDOM ELECTRONIC CO.,LTD

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Postcode：518055

E-mail：sales@rfw-crystals.com

Website：www.rfw-crystals.com

ROFENG WISDOM

QUARTZ CRYSTAL UNITS

RoHS

SPECIFICATIONS FOR APPROVAL

CUSTOMER: _____

CUSTOMER P/NO: _____

OUR MODEL NO: SMD3225 25.000MHz 20pF

DESCRIPTION: QUARTZ CRYSTAL SMD3225

SPECIFICATIONS NO: RFW320EGL1---25.000MHz

OUR DRAWING NO: _____

FOR CUSTOMER MODEL: _____

DATE: 2015-08-25

ENGINEERING DEPT:

DATE:

APPROVED BY CUSTOMER :

SIGNATUER:

DATE:

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SPECIFICATION

Client Name:

Product : Quartz Crystal Resonator

General Part Number and Client Part Number:

General : RFW320EGL1---25.000MHz

Client :

Manufacturer:
Shenzhen Rofeng Wisdom Electronic Co.,Ltd
Building 6,Wangtang Industrial Area Xinwei Village Xili Town Shenzhen City
Post Code: 518055
TEL +86-755-26000659 / FAX +86-755-26000024

Prepared	Checked	Approved

Remarks:

Product Liability, Quality Assurance and Right of the patent shall be under the responsibility of the Manufacturer mentioned above.

Client Acknowledgement:

Date of receipt :

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Record of Change

	Issuing Date	Last Version	New Version	Page Item#	Contents of the Change	Reason	Remarks
1							
2							
3							
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8							
9							
10							
11							
12							

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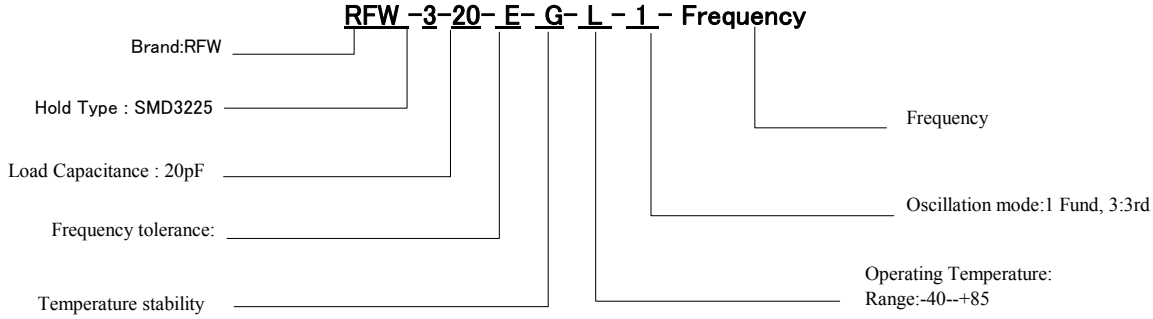
APPROVAL SHEET

SCOPE:

CUSTOMER:

PART NUMBER:

RFW -3-20- E- G- L - 1 - Frequency



PART TYPE :

QUARTZ CRYSTAL （SMD3225）

PART NO DESCRIBTION

25.000MHz（±30ppm/±50ppm/-40~85℃/20pF）

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SPECIFICATION OF QUARTZ CRYSTAL UNITS

1.HOLDER TYPE: SMD3225 25.000MHz

2.GENERAL

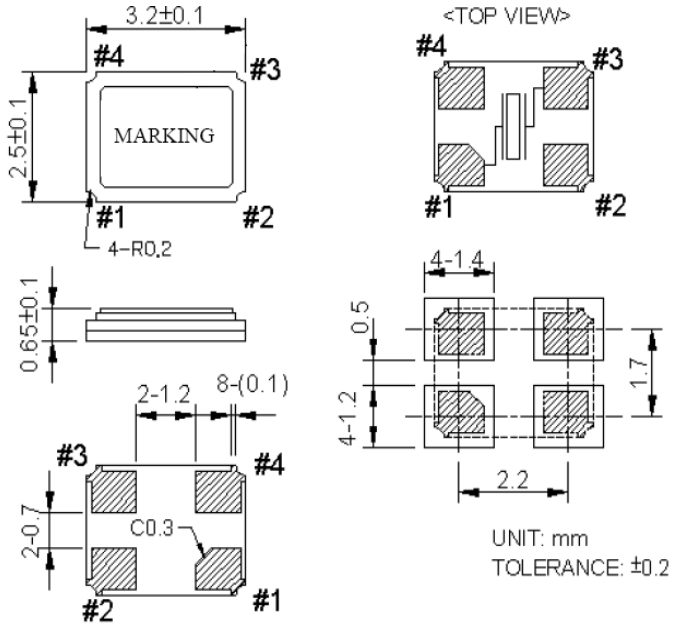
2-1 FREQUENCY (F0)	25.000MHz
2-2 MODE OF OSCILLATION (Mn)	Fundamental
2-3 OPERATION TEMPERATURE RANGE (T0)	-40--+85℃
2-4 STORAGE TEMPERATURE RANGE (Ts)	-40--+85℃
2-5 TEST SET	S&A 250B Network Analyzer
2-6 DRIVE LEVEL (DL)	10μW
2-7 LOADING CAPACITANCE (CL)	20pF

3.ELECTRICAL CHARACTERISTICS

3-1 FREQUENCY TOLERANCE (△f)	±30ppm Max at 25±2℃
3-2 EQUIVALENT RESISTANCE (Rr)	50Ω Max/Series
3-3 TEMPERATURE DRIFT (Tc)	±50ppm/Max -40--+85℃
3-4 SHUNT CAPACITANCE (C0)	3.0pF/Max
3-5 MOTIONAL CAPACITANCE(C1)	N/A
3-6 INSULATION RESISTANCE	500MΩ min/DC100V±15V
3-7 AGING RATE PER YEAR:	±2ppm/Year
3-8 DLD2(0.01~100μW,10STEPS)	15Ω/Max

4.DIMENSIONS AND MARKING

4.1 HOLDER TYPE AND DIMENSION (mm)



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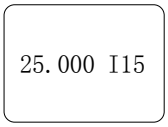
QUARTZ CRYSTAL UNITS

RoHS

4.2 MARKING

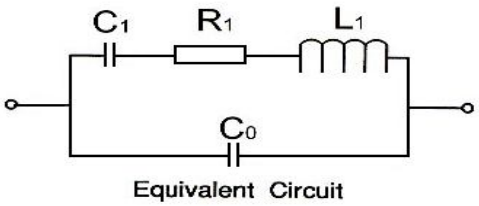


DATE CODE

A: January, B:Feb, C: March, D: April ·····

"15" means 2015 year

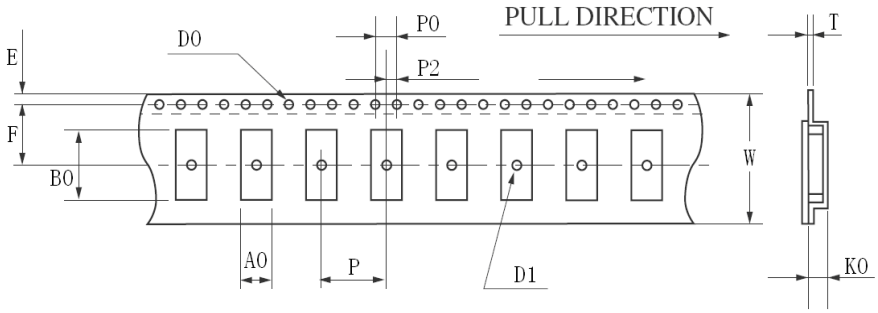
4.3 Equivalent Circuit :



Equivalent Circuit

4.4 THE SPELIFILATION OF TAPE PACKING

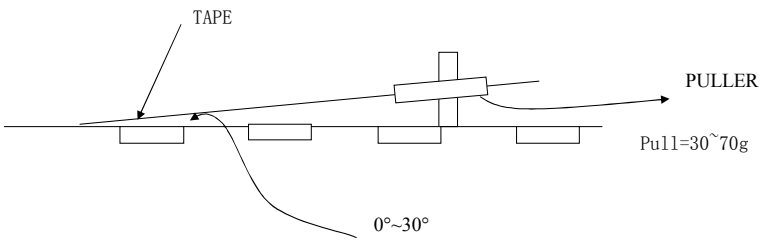
4.4.1The packing requirements and methods of TAPE



	6035	5032	4025	3225	2520
W	16.00±0.30	12.00±0.2	12.00±0.2	8.00±0.2	8.00±0.2
E	1.75±0.10	1.75±0.10	1.75±0.10	1.75±0.10	1.75±0.10
F	7.5±0.10	5.5±0.10	5.5±0.10	3.5±0.10	3.5±0.05
T	0.31±0.10	0.30±0.05	0.30±0.05	0.25±0.05	0.25±0.05
P	8.00±0.10	8.00±0.10	8.00±0.10	4.00±0.10	4.00±0.10
P0	4.00±0.10	4.00±0.10	4.00±0.10	4.00±0.10	4.00±0.10
P2	2.00±0.10	2.00±0.10	2.00±0.10	2.00±0.10	2.00±0.05
D0	ϕ1.50+0.10	ϕ1.55+0.05	ϕ1.50+0.10	ϕ1.55+0.05	ϕ1.55+0.05
D1	ϕ1.50MIN	ϕ1.50MIN	ϕ1.50MIN	ϕ1.00MIN	ϕ1.00MIN
A0	3.95±0.10	3.60±0.10	2.90±0.10	2.70±0.10	2.25±0.05
K0	1.35±0.10	1.40±0.10	1.00±0.10	1.40±0.10	1.15±0.05
B0	6.50±0.10	5.40±0.10	4.40±0.10	3.40±0.10	2.70±0.05

4.4.2 Pull test of TAPE Packing

Tools: Puller and speed Monitor (2mm±1mm/sec)



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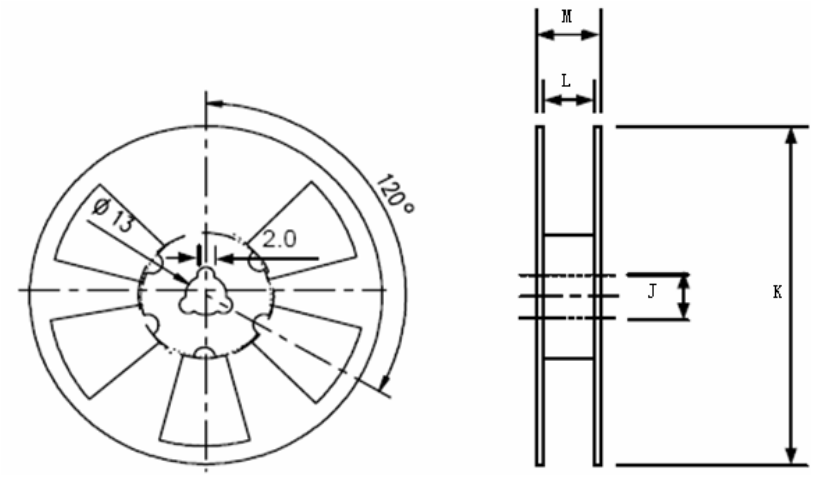
QUARTZ CRYSTAL UNITS

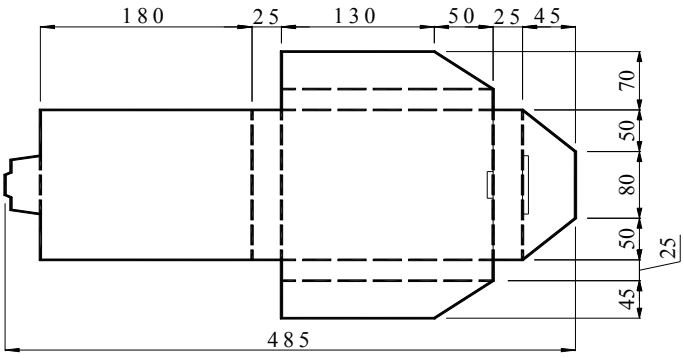
RoHS

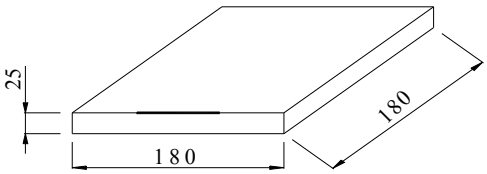
4.5 PACKING FOR APPROVAL

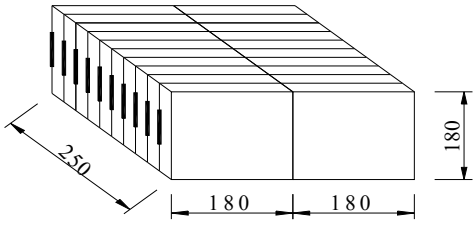


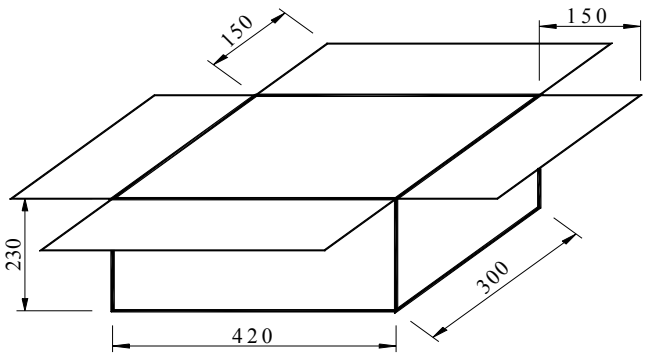
DIMENSIONS	J	K	L	M	pcs/Reel(unit:mm)
	13	178	8	11.5	Standard Reel Quality is 3,000pcs per reel

Carton Dimension (unit : mm)









20 Inner boxes = 1 Carton

120K pcs = 1 Carton

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QUARTZ CRYSTAL UNITS

RoHS

5.MECHANICAL ENDURANCE

Provided that measurement shall be carried out after letting it alone in the room temperature for 1 hour.

5.1.SHOCK

Electrical charateristics shall be satisfied after dropping three times from the height of 100cm onto the Concrete.

5.2.VIBRATION

Electrical charateristics shall be satisfied after supplying following vibration.

a).ENTIRE FREQUENCY RANGE	10~2000Hz
b).REPEATED PERIOD	1~2min
c).AMPLITUDE	1.52mm
d).DIRECTION	X.Y.Z
e)ACCELERATED SPEED	20g
f).PERIOD	4hours/Each Direction

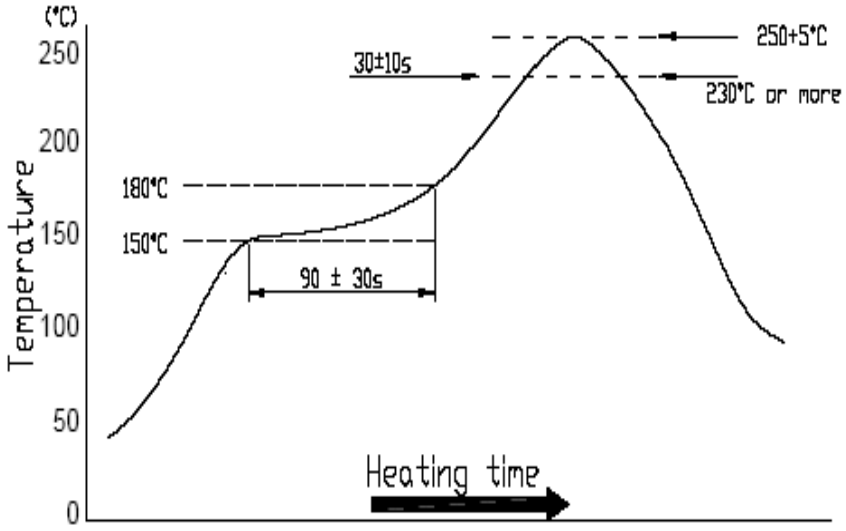
5.3.SEALING TIGHTNESS

Put the specimens in C_2H_5OH,rasie pressure it with 0.5Mpa for 10 min, test the insulation resistance at DC.100V,the result shall be over 500MΩ. Electrical characteristics shall be satisfied and no sealing damage.

5.4.SOLDERING HEAT RESISTANCE

Electrical characteristics shall be satisfied .Without distinct looseness of terminals.

①.FLOW Soldering



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QUARTZ CRYSTAL UNITS

RoHS

②.SOLDERING DIP

Terminals/lead-wires of specimen shall be dipped into solder melter tank at +245℃±5℃ for 5±0.5 sec.

③.SOLDER HEATING

Terminals/lead-wires of specimen shall be dipped into solder melter tank at +260℃±5℃ for 10±1 sec.

5.5.ENVIRONMENTAL ENDURANCE

Provided that measurement shall be carried out after letting it alone in the room temperature for 1 hour.

①HUMIDITY

Electrical characteristics shall be satisfied after letting it alone at 60±2℃ in humidity of 95% for 500 hours.

②.STORAGE IN LOW TEMPRATURE

Electrical characteristics shall be satisfied after letting it alone at -40±3℃ for 168 hours.

③.STORAGE IN HIGH TEMPRATURE

Electrical characteristics shall be satisfied after letting it alone at 125±2℃ for 168 hours.

④.TEMPERATURE CYCLE

Electrical characteristics shall be satisfied after supplying the following temperature cycle(3cycle).Temperature shift from low to high, high to low shall be done in 1℃/sec.